Paper No. 12

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte STANISLAW MAJEWSKI and ANDREW G. WEISENBERGER

> Appeal No. 2003-1278 Application No. 09/577,701

> > ON BRIEF

Before FRANKFORT, NASE, and BAHR, <u>Administrative Patent Judges</u>. NASE, <u>Administrative Patent Judge</u>.

## **DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1 to 8, which are all of the claims pending in this application.

We REVERSE.

Application No. 09/577,701

## BACKGROUND

The appellants' invention relates to apparatus for optically coupling pixilated scintillation arrays with position sensitive photomultipliers (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Hilton et al. (Hilton)	3,225,193	Dec. 21, 1965
Spelha et al. (Spelha)	3,723,735	Mar. 27, 1973
Muehllehner	3,937,964	Feb. 10, 1976
Persyk	5,059,798	Oct. 22, 1991
Yamakawa et al. (Yamakawa)	5,442,181	Aug. 15, 1995

Claims 1, 4 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Muehllehner in view of Hilton.

Claims 2 and 5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Muehllehner in view of Hilton and Spelha.

Claims 3 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Muehllehner in view of Hilton and Persyk.

Application No. 09/577,701

Claim 8 stands rejected under 35 U.S.C. § 103 as being unpatentable over Muehllehner in view of Hilton, Persyk and Yamakawa.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 10, mailed December 20, 2002) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 9, filed October 9, 2002) for the appellants' arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a <u>prima facie</u> case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 8 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a <u>prima facie</u> case of obviousness. <u>See In re Rijckaert</u>, 9 F.3d 1531,

1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A <u>prima facie</u> case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention.

See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and <u>In re Lintner</u>, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

## Claims 1, 4 and 6

We will not sustain the rejection of claims 1, 4 and 6 under 35 U.S.C. § 103.

In this rejection (answer, pp. 3-5) the examiner (1) set forth the pertinent teachings of Muehllehner and Hilton; (2) ascertained that Muehllehner lacks the scintillation layer is pixilated; and (3) concluded that it would have been obvious to one having ordinary skill in the art to provide a pixilated scintillation layer in the device of Muehllehner in order to improve both image resolution and efficiency as taught by Hilton.

In our view, the teachings of Hilton would have made it obvious, at best, to have replaced both Muehllehner's laminar or planar scintillation crystal 37 and Muehllehner's light guide 45 with Hilton's light pipe fibers. As such, the teachings of the applied prior art would not have made it obvious at the time the invention was made to a person of

Application No. 09/577,701

ordinary skill in the art to have modified Muehllehner's laminar or planar scintillation crystal with a pixilated scintillation layer optically coupled to a light guide which is then optically coupled to an array of position sensitive photomultiplier tubes.<sup>1</sup>

Since the examiner has not established that it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Muehllehner's laminar or planar scintillation crystal to be a pixilated scintillation layer for the reasons set forth above, the decision of the examiner to reject claims 1, 4 and 6 under 35 U.S.C. § 103 is reversed.

In addition, the examiner's position that Muehllehner's light guide includes an array of trapezoidal light collectors is shear speculation unsupported by the teachings of Muehllehner. In that regard, while Muehllehner teaches that the pedestals of the light guide 45 shown in Figure 2 are separated from each other by V-shaped grooves 15, it is not inherent<sup>2</sup> that the pedestals form an array of trapezoidal light collectors.

<sup>&</sup>lt;sup>1</sup> U.S. Patent No. 6,462,341 to Muehllehner (copy attached) teaches a pixilated scintillation layer optically coupled to a light guide which is then optically coupled to an array of position sensitive photomultiplier tubes.

<sup>&</sup>lt;sup>2</sup> When a reference is silent about an asserted inherent characteristic, it must be clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

# Claims 2, 3, 5, 7 and 8

We have also reviewed the references to Spelha, Persyk and Yamakawa additionally applied in the rejection of claims 2, 3, 5, 7 and 8 but find nothing therein which makes up for the deficiencies of discussed above regarding claims 1, 4 and 6. Accordingly, the decision of the examiner to reject claims 2, 3, 5, 7 and 8 under 35 U.S.C. § 103 is also reversed.

# **CONCLUSION**

To summarize, the decision of the examiner to reject claims 1 to 8 under 35 U.S.C. § 103 is reversed.

# **REVERSED**

CHARLES E. FRANKFORT Administrative Patent Judge	) ) )
JEFFREY V. NASE Administrative Patent Judge	) ) BOARD OF PATENT ) APPEALS ) AND ) INTERFERENCES )
JENNIFER D. BAHR Administrative Patent Judge	) ) )

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